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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,564	10/31/2003	Tapesh Yadav	037768-0173	1121
22428	7590	07/17/2007		
FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			EXAMINER TSOY, ELENA	
			ART UNIT 1762	PAPER NUMBER
			MAIL DATE 07/17/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/698,564	Applicant(s) YADAV, TAPESH	
	Examiner Elena Tsoy	Art Unit 1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 June 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 2,5,7-10,21-23,25,26 and 28-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4,6,11-20,24,27,31 and 32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

Amendment filed on June 11, 2007 has been entered. Claim 3 has been cancelled. New claims 31-32 have been added. Claims 1-32 are pending in the application. Claims 2, 5, 7-10, 21-23, 25, 26, 28-29, and 30 are withdrawn from consideration as directed to a non-elected invention.

***Claim Objections***

1. Objection to claim 4 because of the informalities has been withdrawn due to amendment.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Rejection of claims 1, 3, 4, 6, 11-20, 24, and 27 under 35 U.S.C. 112, first paragraph has been withdrawn due to amendment.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Rejection of claims 1, 3, 4, 6, 11-20, 24, and 27 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention has been withdrawn due to amendment.

### ***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

#### **The Examiner Note:**

- (i) in the following paragraphs claim 3 was substituted by claims 31-32 since the limitations of new claims 31-32 were recited in cancelled claim 3.
- (ii) since terminal disclaimer disclaims the terminal part of the term of any patent granted on current Application '564, provisional rejection of claims 31-32 reciting limitations of cancelled claim 3 has been withdrawn due to filing a proper terminal disclaimer.

7. Provisional rejection of claims 1, 4, 6, 11-15, 17-19, 24, and 31-32 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-5, 7 of copending Application No. 11/113,320 has been withdrawn due to filing a proper terminal disclaimer.

8. Provisional rejection of claims 1, 4, 6, 11-15, 17-19, 24, and 31-32 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9, 16-24,

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31-32 of copending Application No. 11/491,484 has been withdrawn due to abandonment of the application.

9. Provisional rejection of claims 1, 4, 6, 11-15, 17-19, 24, and 31-32 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4, 7, and 12-14 of copending Application No. 10/292,263 has been withdrawn due to filing a proper terminal disclaimer.

10. Provisional rejection of claims 1, 4, 6, 11-15, 17-19, 24, and 31-32 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9, 16-24, 31-43, 45, 46, and 50-58 of copending Application No. 10/614,845 has been withdrawn due to filing a proper terminal disclaimer.

11. Provisional rejection of claims 1, 4, 6, 11-15, 17-19, 24, and 31-32 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4, 7, 11-15, 19, 22, 24-26, and 29 of copending Application No. 10/315,271 has been withdrawn due to filing a proper terminal disclaimer.

12. Provisional rejection of claims 1, 4, 6, 11-15, 17-19, 24, and 31-32 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5, 11, 13, 16-17, 21-23, and 27 of copending Application No. 10/315,272 has been withdrawn due to filing a proper terminal disclaimer.

***Claim Rejections - 35 USC § 102***

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 1, 4, 6, 11-15, 17-20, 24, and 31-32 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bickmore et al (US 5984997) for the reasons of record set forth in paragraph 16 of the Office Action mailed on 3/9/2007 because Bickmore et al disclose metal carboxylates (See column 4, line 32).

16. Claims 1, 4, 6, 11-15, 17-20, 24, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konig et al (US 5,356,120) in view of Holzl (US 3,565,676) for the reasons of record set forth in paragraph 17 of the Office Action mailed on 3/9/2007.

17. Claims 16 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bickmore et al in view of Umeya et al (US 5,489,449) for the reasons of record set forth in paragraph 18 of the Office Action mailed on 3/9/2007.

18. Claims 16 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konig et al in view of Holzl, further in view of Umeya et al for the reasons of record set forth in paragraph 19 of the Office Action mailed on 3/9/2007.

19. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Konig et al in view of Holzl, further in view of Bickmore et al.

Konig et al in view of Holzl are applied here for the same reasons as set forth in paragraph 17 of the Office Action mailed on 3/9/2007. Konig et al disclose that metal-containing

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precursors include  $\text{BCl}_3$ , boric acid esters, boron  $\text{SiCl}_4$ , other chlorosilanes, silanes, metal halides, partly hydrogenated metal halides, metal hydrides, metal alcoholates, metal alkyls, metal amides, metal azides, metal boranates and metal carbonyls (See column 2, lines 55-61). Konig et al fail to teach that metal-containing precursors include a metal carboxylate.

Bickmore et al teach that metal-containing precursors such as nitrate, nitrites, nitriles, nitrides, carbonates, bicarbonates, hydroxides, cyanos, organometallics, carboxylates, amines, and amides may be used for manufacturing nanoscale powder (See column 4, lines 30-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used metal carboxylates in Konig et al in view of Holzl instead of metal amides with the expectation of providing the desired nanoscale powders since Bickmore et al teach that carboxylates and amides may be used for manufacturing nanoscale powder.

### ***Response to Arguments***

20. Applicants' arguments filed June 11, 2007 have been fully considered but they are not persuasive.

Applicants state that the current Application is entitled to priority data of US 6,228,908 because it incorporates by reference US 5984997 to Bickmore et al.

However, *incorporation by reference* is not basis for claiming priority data. It is held that when applicant files a continuation-in-part whose claims are not supported by the parent application, the effective filing date is the filing date of the child CIP. Any prior art disclosing the invention or an obvious variant thereof having a critical reference date more than 1 year prior to the filing date of the child will bar the issuance of a patent under 35 U.S.C. 102(b). See MPEP 2133.01. The current Application is **CIP** of 09/790,036 (now US 6,933,331) where the parent application

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'036 does not support a new limitation "1500-4000<sup>0</sup>C". Therefore, the current Application is not entitled to the filing date and priority date of the parent application '036.

The current Application is entitled to priority data of the Divisional Application '387, which is 8/8/2001 (not to filing date of earliest parent application 08/707,341) because a limitation "greater than 2500<sup>0</sup>C" in Claim 1 and "greater than 3000<sup>0</sup>C" in Claim 15 was added *first* time to the Divisional Application 10/004,387 (now Patent 6,652,967).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is 571-272-1429. The examiner can normally be reached on Monday-Thursday, 9:00AM - 5:30 PM.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elena Tsoy  
Primary Examiner  
Art Unit 1762

ELENA TSOY  
PRIMARY EXAMINER  
*ETsoy*

June 27, 2007